

# **The Process and Schedule for Selecting Pilot Projects and Brief Descriptions of the Eight Pilot Project Candidates**

Updated Based on Discussion of the Technical Advisory Committee on November 27, 2007

12.28.07

## **PROCESS AND SCHEDULE FOR SCOPING POTENTIAL PILOT PROJECTS**

In early February 2008, the Puget Sound Coordinated Monitoring Program's Technical Advisory Committee (TAC) will meet to review and discuss the descriptions of eight potential pilot projects, and to narrow that list to two or three to recommend to the Governance Committee and Puget Sound Partnership. This is the proposed process and schedule for scoping the eight potential projects leading up to the TAC's meeting.

### ***The Outline for Scoping the Potential Projects***

A coordinator will be designated to lead the scoping of each potential pilot project. Listed below are the original descriptions of the projects with the names of the Committee members who helped write them. By January 4, 2008, a Committee member should volunteer to coordinate the scoping of each project. That person could be one of the people who helped define it originally or someone else.

These are the questions that should be answered in the one or two page scope of the potential pilot project:

1. What problem(s) is being addressed by the proposal, and what would be the expected outcome(s) of the project?
2. What is the current status of the situation? In other words, is anything underway today to address or resolve the problem or are the "tools" needed to address it in place? Has there been some success, or is the problem getting worse?
3. Who should participate in the project, and why?
4. What process or steps would be needed to address the problem and achieve the expected outcomes?
5. What would be the approximate cost of the project? What portion of the costs would be paid out of the funding Department of Ecology received to launch this program? What portion if any, would be paid by others?
6. How would this project address interests, needs and concerns of rural communities?
7. How would the project meet the criteria agreed to by the Committee in October? Those criteria are: a) Builds the credibility of the program. b) Tests working relationships. c) Provides credible and meaningful information that addresses the framework questions. d) Encourages leveraging of resources. e) Is voluntary ("a coalition of the willing") and attracts additional participants over time. f) Is simple. g) Can get going in less than one year.

### ***The Schedule for Scoping the Potential Projects***

This is the process suggested by Committee facilitator Jim Reid for scoping the potential pilot projects leading up to the Committee's February meeting:

- 4 January: A Committee member notifies Jim that she/he will serve as coordinator of the scoping of a project. If the scoping is to be done by a "subcommittee," the Coordinator should identify the members of the group, too. (Coordinators should also feel free to informally circulate the scoped proposal and consult with fellow Committee members.)
- 5 January: Jim sends to all Committee members an updated list of the coordinator and "subcommittee" involved in scoping each project.
- 31 January: The definitions of each pilot project, following the outline above, are submitted to Jim by the scoping coordinator.
- 1 February: Jim sends the scoped projects to all Committee members for review.
- 5-7 February: The Committee meets on one of these days to review and discuss the proposals, and to select 2-3 to recommend to the Governance Committee and Puget Sound Partnership.

### **THE ORIGINAL DESCRIPTIONS OF THE EIGHT PILOT PROJECT CANDIDATES**

At its meeting on November 27, 2007, the Technical Advisory Committee decided to scope eight pilot projects that had been originally proposed. Listed below are the descriptions of the projects that the Committee reviewed at that meeting. Also identified are the Committee members who helped write the original descriptions.

Jim Simmonds of King County has volunteered to coordinate the scoping of two projects. Therefore, he is identified as the coordinator, and his name appears in boldface. We expect other Committee members to volunteer to serve as the coordinator for scoping the other six potential pilot projects, and to notify Jim Reid by the end of the business day on January 4 that they are willing to serve as the coordinator.

While this may no longer be relevant in the process of selecting two or three projects to discuss with the Governance Committee and Puget Sound Partnership, the potential pilot projects are listed in order of the number of votes they received in an informal polling of Committee members' preferences that was conducted in early November.

### ***Development of Standardized QAPPs and SOPs for Stormwater***

Through use of regional stormwater standard operating procedures (SOPs) and quality assurance project plans (QAPP), data utility may be maximized to ensure clear interpretation and comparability of results.

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The increasing need for method standardization was recognized by agencies implementing the National Water Quality Monitoring Design, as tasked by the U.S. Commission on Ocean Policy (COP) in 2004 (ACWI 2007 - see design features). Accreditation of laboratories (NELAP and Ecology's Laboratory Accreditation Program) promotes data comparability for specific laboratory analyses. Similarly, a QAPP design and field component SOP for stormwater will support comparability of stormwater data throughout the region.

*Luanne Coachman, Dana de Leon, Heather Kibbey, and Chris Burke (City of Tacoma)*

### ***Understanding Stormwater Suspended Particulate Matter Sampling Techniques***

The NPDES Phase I permit requires monitoring of sediments from stormwater monitoring sites using sediment-traps. Traditional designed sediment traps sample stormwater suspended particulate matter from a discrete point in the water column. The sampling method is simply a sample bottle with a nozzle angled 45 degrees upward against flow. Issues with the sampling method include:

It takes up to six months to gain sufficient solids volume for analysis.

A discrete mid-point, vertical sample from a stormwater pipe does not sample bedload. Results are mainly used for source tracing and may not be appropriate for developing pollutant loadings.

A study designed to evaluate the relationship (a solids balance) between co-located whole-water samplers and traditional sediment traps would enable us to assess what fraction of solids the sediment trap represents in the whole water sample. In addition, we could test if a redesigned sediment trap that fits into the base of a stormwater pipe is a better sampling device. Advantages of a redesigned sediment trap (that works) would include: sampling bedload, sampling settling and suspended solids (i.e., sediment associated contaminants); and the ability to target a single storm or first flush event versus leaving the device out for six months.

The results of this study will allow us to better assess the sediment-trap devices, their use in stormwater monitoring and source control, and what the results represent and their appropriate uses (i.e., source control, loading estimates, etc.).

*Bob Cusimano, Dana de Leon, and Chris Burke*

### ***Inter-laboratory Calibration Exercise***

One of the first steps towards credible water quality monitoring data is validation of analytical techniques. For this project we would select a monitoring study that is already planned and will be underway soon. The investigators would perform additional sample

collection of a chosen medium to provide the splits to be analyzed for selected pollutants at multiple laboratories used by local, state, tribal and federal governments in performing their water quality studies.

### ***Stormwater Toxicity Study***

The NPDES Phase I Permit requires stormwater toxicity sampling for seasonal first flush from three land uses: residential, commercial and industrial. A single sample is required to be taken on an annual basis from each land use. The design assumes stormwater toxicity is primarily associated with contaminants in the fall “first flush” event.

A different approach would be to sample events associated with each season: spring, summer, fall and winter. This would provide a good foundation for statistical analyses evaluating relationships between seasons, land-uses and contaminants.

Results from multiple seasonal events under a 2 year program would dramatically improve the effectiveness of Toxicity Identification/Reduction Evaluation (TI/RE) workplan/investigation by providing supporting evidence documenting 1) the actual presence of toxicity; 2) any relationships with contaminants measured in the samples; and 3) any relationships with adjoining land-uses. The results from this study would greatly improve the focus and cost-effectiveness of any subsequent investigations, directed source control efforts and revisions to stormwater program elements (e.g. public education).

*Coordinating the scoping of this potential pilot project: Dana de Leon and Chris Burke, Tacoma*

### ***Puget Sound-wide Database for BIBI followed by gap analysis***

Expand the King/Snohomish/Pierce County & Seattle database design and population effort and solicit contributions from the rest of the jurisdictions in Puget Sound. Do a gap analysis to help guide future BIBI sampling efforts by the monitoring consortium and others.

*Coordinating the scoping of this potential project: Jim Simmonds, King County*

### ***Process-Based Puget Sound Receiving Water Quality Study Design***

To complement status and trends monitoring efforts currently underway, and plans to expand those efforts, a robust scientific study design is needed that will provide a framework for answering effectiveness questions and help strengthen resource management and policy decisions in Puget Sound. Elements of this process-based study design would be site selection criteria, parameters, timing and frequency of sample collection, field protocols, analytical methods, etc. The study would include

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consideration and application of land-use indicator data so that resource management techniques can be evaluated separately from other influences on receiving water quality.

*Karen Dinicola*

***Organize an ambient water quality status program***

This would involve everyone getting on the same page about methods, sops, and data sharing. The analysis is relatively inexpensive, participants will discover if other constraints exist in their organization. Most importantly, I can't think of a better way to raise awareness of the Puget Sound's condition than to relay water quality conditions to people where they know they can have an effect.

*Andy Rheume*

***SOPs for Continuous Flow/Temperature Monitoring Plus Common Database***

Develop common protocols for continuous flow and temperature monitoring in streams, rivers, wetlands, lakes, and stormwater facilities in the Puget Sound region. Review existing data management systems for continuous datasets. Implement a common data management system and solicit participation from jurisdictions throughout Puget Sound region. Conduct a gap analysis to identify waters not gaged for which gaging is a high priority.

***Coordinating the scoping of this potential pilot project: Jim Simmonds, King County***